



**STATE OF RHODE ISLAND
UNIFIED HEALTH
INFRASTRUCTURE
PROJECT**

**IV&V MONTHLY PROJECT STATUS REPORT
PERIOD ENDING OCTOBER 31, 2015**

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1. PROJECT BACKGROUND

The UHIP project was launched on January 22, 2013.

The goals of the UHIP project are:

- To provide Rhode Islanders and their families, Rhode Island businesses and their employees, and issuers serving the Rhode Island market an integrated, end-to-end service solution for health insurance and human services programs
- To create an integrated multi-channel solution (web, phone, walk-in) for Medicaid/CHIP, SNAP, TANF, and other human services programs, as well as (subsidized and unsubsidized) commercial health insurance
- To modernize the eligibility systems for the State's health and human services programs
- To add value to small business health insurance purchasing
- To enhance the customer experience—and the State's efficiency—for all programs involved

1.1 Project Constraints

The State's limited resources (funding and staff) and aggressive project schedule provide unique challenges:

- The UHIP Project requires State subject matter experts with business and technology experience; the State's focus on day-to-day operations limits the number of available resources to assist with the project
- The project's aggressive schedule has been driven by external (Federal) milestones:
 - ✓ October 1, 2013 – Open enrollment began
 - ✓ January 1, 2014 – Implementation of a fully ACA-compliant Exchange
 - ✓ December 31, 2015 – 90% federal matching funding for Integrated Eligibility Systems (permanent change to 90% matching is pending) and waiver of program cost allocation requirements (extension to December 31, 2018 is pending)

2. IV&V OVERVIEW

The HHS Enterprise Performance Life Cycle (EPLC) framework defines IV&V as a rigorous independent process that evaluates the correctness and quality of the project's business process to ensure that the project is developed in accordance with customer requirements and is well engineered.

2.1 IV&V Objectives

The objectives of performing IV&V include:

- Facilitate early detection and correction of cost and schedule variance
- Enhance management insight into process and product risk
- Support project life cycle processes to ensure compliance with regulatory, performance, schedule, and budget requirements
- Validate the project's products and processes to ensure compliance with defined requirements
- Provide supporting evidence that the product satisfies client requirements

CSG recognizes the need for maintaining strict independence from the overall project management team and implementation vendor. In this role, CSG provides an objective perspective that is intended to minimize risk and maximize the opportunity for the success of the overall project effort.

3. IV&V APPROACH

CSG's risk assessment primarily focuses on:

- **Schedule/Resources** – Is the schedule defined, managed, and properly resourced?
- **Scope** – Is scope defined and managed; including requirements management traceability?
- **Cost** – Are budget requirements defined and managed?
- **Quality**
 - ✓ Are quality processes defined and followed?
 - System Development Life Cycle (SDLC) processes
 - Project Management (PM) processes
 - ✓ Do these SDLC and PM processes result in quality outcomes and deliverables?

Inputs into our assessment include project documentation and industry standards:

- Project meetings with the State, Deloitte, Northrop Grumman, KPMG, and PCG
- The State of Rhode Island and Deloitte Unified Health Infrastructure Project Agreement/Bridging Document and other contract amendments
- The UHIP Project Management Plan (i.e., Plan 01) and related deliverables
- Industry Best Practice documents, including the following:
 - ✓ A Guide to the Project Management Body of Knowledge (PMBOK)
 - ✓ Multiple IEEE Standards

4. IV&V PROJECT HIGHLIGHTS

RI UHIP IV&V Monthly Project Status Report			
Project Name	RI UHIP (IV&V) – Phase 1	Project Health	Moderate Risk – Consider corrective action or monitor previous corrective action; moderate areas of concern have been identified
Project Name	RI UHIP (IV&V) – Phase 2	Project Health	Moderate Risk – Consider corrective action or monitor previous corrective action; moderate areas of concern have been identified
Project Period	03/04/2013–02/24/2016	Reporting Period	10/01/2015–10/31/2015

This Monthly Project Status Report provides a review of the project status of Phase 1 and Phase 2 from October 1, 2015 through October 31, 2015. Risk mitigation/avoidance actions taken since the prior IV&V report are outlined in Section 7 of this report. These activities did not change the Phase 1 and Phase 2 overall health rating assessments of “Moderate Risk – Consider corrective action or monitor previous corrective action; moderate areas of concern have been identified” compared to last month.

Key Messages/Highlights
<p>UHIP Project risks are categorized into the following areas: Scope, Cost, Schedule/Resources, and Quality. A summary of project risks and related concerns (as of October 31, 2015) is provided below. The progress of corrective actions taken during October is outlined in Section 7 – IV&V Risk Status.</p> <p>➤ Scope</p> <ul style="list-style-type: none"> ✓ The goal of scope management is to apply and enforce scope management processes: <ul style="list-style-type: none"> • Requirements Traceability Matrix (RTM) management, as outlined in approved project planning deliverables, must be applied and enforced to ensure existing requirements are delivered and new/changed requirements are addressed • Change Control, as outlined in approved project planning deliverables, must fully consider the impact of each change on the project’s schedule, resource requirements, and finances ✓ Scope management is intended to address the scope issues experienced in October: <ul style="list-style-type: none"> • Development of a Single Database is under construction • The contractual 2015 Disaster Recovery Plan and test date needs to be finalized • Phase 1 and Phase 2 Functional and Technical RTM have not been finalized • Change Requests on hold; Deloitte currently provides rough order of magnitudes (ROMs) for small changes only • An assessment of 28 key factors covered as part of SOC 2 Type II audit by Grant Thornton, LLP <ul style="list-style-type: none"> ○ SOC 2 Type II (Security) Readiness Review; Gap Analysis underway <p>➤ Cost</p> <ul style="list-style-type: none"> ✓ Additional State funds have been requested via the revised SFY2016 budget process to cover pending EOHHS and DHS UHIP costs

Key Messages/Highlights

- ✓ HSRI continues to closely monitor funding issues based on responses received from CMS and FNS
- ✓ Additional UHIP costs will be incurred to extend the development project through July 2016

➤ Schedule/Resources

- ✓ Medicaid 1095-B UAT scheduled to start the week of Thanksgiving
- ✓ Lack of available Deloitte resources to discuss technical architecture changes
- ✓ Deloitte to provide a disaster recovery schedule for the site change cutover, hardware inventory, and test plan
- ✓ Phase 2 Release 7 UAT has no defined end date

➤ Quality

- ✓ A total of 22 deferred defects remain from previous UATs
 - 1 critical, 17 highs, 3 mediums, and 1 low
- ✓ Incident Management tickets related to the auto renewal batch
- ✓ Bimonthly Automated and Manual Code Review Report #8 under construction
- ✓ Deloitte Security Team generating an application vulnerability security report
- ✓ Deloitte monitoring application performance during open enrollment period

The remaining sections of this document outline the basis for CSG's assessment.

5. IV&V PROJECT DASHBOARD

OVERALL HEALTH RATING	
Previous	Current
Moderate Risk (Phase 1) – Consider corrective action or monitor previous corrective action. Moderate areas of concern have been identified.	Moderate Risk (Phase 1) – Consider corrective action or monitor previous corrective action. Moderate areas of concern have been identified.
Moderate Risk (Phase 2) – Consider corrective action or monitor previous corrective action. Moderate areas of concern have been identified.	Moderate Risk (Phase 2) – Consider corrective action or monitor previous corrective action. Moderate areas of concern have been identified.
<p>Risk mitigation/avoidance actions have been taken since the prior IV&V report and are outlined in Section 7 of this report. The key activities include:</p> <ul style="list-style-type: none"> ➤ Scope <ul style="list-style-type: none"> ✓ Medicaid 1095-B UAT testing defined ✓ Phase 1 Release 6.6 FDDs approved ✓ Phase 2 Release 7 continues under construction ✓ Single Database Design Document approved ➤ Cost <ul style="list-style-type: none"> ✓ FNS approved the IAPDU (CMS already approved the IAPDU) ✓ State is reviewing Deloitte Contract Amendment #35 which will enable system development activities to continue through February 2016 <ul style="list-style-type: none"> • Total cost is \$24.8 million • Federal share is \$20.9 million; approved by CMS and FNS • State share is \$3.9 million ➤ Schedule/Resources <ul style="list-style-type: none"> ✓ Medicaid 1095-B UAT schedule defined ✓ Phase 1 Release 6.5 deployed on schedule ✓ Onsite support for the Phase 2 Release 7 UAT testers ✓ Observe Mock Pilot #2 in the Middletown office ➤ Quality <ul style="list-style-type: none"> ✓ Monitored “Not Reproducible” UAT defects from Release 6.5; none identified in production ✓ Hot Fixes deployed throughout the month to address Production issues ✓ Conducted pain points and lessons learned review of Release 6.5 ✓ Mock Pilot #2 observed by IV&V 	

5.1 Project Status Indicators

The following tables represent the current project status indicators for both Phase 1 and Phase 2 activities. The areas of Scope, Schedule/Resources, and Quality are assessed separately for Phase 1 and Phase 2; Cost is assessed the same in both phases.

Table 1 - Phase 1 & Phase 2 Project Status Indicators

PHASE 1 - PROJECT STATUS INDICATORS – Overall Status Indicator = Moderate											
SCOPE			COST			SCHEDULE / RESOURCES			QUALITY		
Previous	Current	Trend	Previous	Current	Trend	Previous	Current	Trend	Previous	Current	Trend
Moderate Risk	Moderate Risk	Positive	Moderate Risk	Moderate Risk	Positive	Moderate Risk	Moderate Risk	Positive	Moderate Risk	Moderate Risk	Negative

PHASE 2 - PROJECT STATUS INDICATORS – Overall Status Indicator = Moderate											
SCOPE			COST			SCHEDULE / RESOURCES			QUALITY		
Previous	Current	Trend	Previous	Current	Trend	Previous	Current	Trend	Previous	Current	Trend
Moderate Risk	Moderate Risk	Positive	Moderate Risk	Moderate Risk	Positive	High Risk	High Risk	Positive	Moderate Risk	Moderate Risk	Negative

5.2 Project Status Indicator Criteria

The following criterion is used to define the indicator in Section 5.1.

- Low Risk – Project is on track with minor concerns.
- Moderate Risk – Consider corrective action or monitor previous corrective action. Moderate areas of concern have been identified.
- High Risk – Immediate corrective action required. Significant concerns have been identified.

6. MILESTONES / IV&V DELIVERABLE STATUS

The following table lists the CSG IV&V deliverables for the reporting period as of October 31, 2015.

Table 2 - Table of Milestone and IV&V Deliverable Status

Description	Status	Target Date	Date Submitted	Date Approved
3.5.3.1.8: Bimonthly Automated and Manual Code Review Report #7	Approved	09/18/2015	09/17/2015	10/02/2015
3.5.9.3: Monthly Financial Status Report for June 2015	Approved	09/25/2015	09/16/2015	10/26/2015
3.5.9.3: Monthly Financial Status Report for July 2015	Approved	09/25/2015	09/24/2015	10/26/2015
3.5.5.3.7: UAT Summary Report – Phase 2 Release 7 Cycle 1	Approved	09/25/2015	09/24/2015	10/08/2015
3.5.4.1.6: Continuous Integration Review – Phase 2 Release 7 Cycle 1	Approved	09/25/2015	09/25/2015	10/09/2015
3.5.5.3.9: UAT Summary Report – Phase 1 Release 6.5	Approved	10/16/2015	10/14/2015	10/29/2015
3.5.4.1.8: Continuous Integration Review – Phase 1 Release 6.5	Approved	10/16/2015	10/16/2015	10/30/2015
3.5.1.2: IV&V Monthly Review and Assessment Report for September 2015	Submitted	10/16/2015	10/21/2015	
Upcoming Deliverables				
3.5.9.3: Monthly Financial Status Reports for August and September 2015	In Progress	11/27/2015		
3.5.1.2: IV&V Monthly Review and Assessment Report for October 2015	Not Started	12/04/2015		
3.5.3.1.8: Bimonthly Automated and Manual Code Review Report #8	In Progress	12/31/2015		
3.5.8.2: System Audit Report - Phase 1	Not Started	End of Phase 1		
3.5.6.2: Implementation Readiness Report - Phase 2	In Progress	Pending New Schedule		
3.5.7.1.2: Reusability Report – Phase 2	Not Started	Pending New Schedule		
3.5.8.1.2: System Audit Plan – Phase 2	Not Started	End of Phase 2		

7. IV&V RISK STATUS

UHIP project risks have been summarized into four (4) groupings: scope, cost, schedule/resources, and quality.

7.1 IV&V Risk State: Scope

- An assessment of 28 key factors covered as part of SOC 2 Type II audit by Grant Thornton, LLP
 - ✓ SOC 2 Type II (Security) Readiness Review; Gap Analysis underway
- Development of single database under construction
- The contractual 2015 Disaster Recovery Plan and test date needs to be finalized
- Phase 1 and Phase 2 Functional and Technical RTM have not been finalized
- Change Requests on hold; Deloitte currently provides ROMs for small changes only

Major Impacts:

- State insight into the SOC 2 Type II audit needed; security enhancements may be required
- Deloitte to provide a list of all system, network, and hardware changes for submission to CMS
- Single database timeline poses possible constraints (e.g., possible impact on start of SIT)
- The contractual 2015 Disaster Recovery test has been delayed due to a site change
- Outstanding functional and technical requirements may expand scope within the Phases

Recommended Risk Mitigation:

- Contract amendments finalize the scope of Phase 1 and Phase 2
 - ✓ Establish an end to Phase 1
 - ✓ Contract amendments approved through Phase 2 go-live
- Disaster Recovery Plan finalized for the State to review; CMS requirements included
- Phase 1 and Phase 2 RTMs continuously updated within JAMA

7.2 IV&V Risk State: Cost

- Additional State funds have been requested via the revised SFY2016 budget process to cover pending EOHHS and DHS UHIP costs
- HSRI continues to closely monitor funding issues based on responses received from CMS and FNS
- Additional UHIP costs will be incurred to extend the development project through July 2016

Major Impacts

- EOHHS, DHS, and HSRI will need additional funding to meet their long term UHIP financial commitments from a State funds perspective
- EOHHS, DHS, and HSRI will be asked to approve additional spending that will require additional UHIP budget appropriations for State funds

Recommended Risk Mitigation:

- Coordinate with the Budget Office for increased EOHHS and DHS SFY2016 funding; obtain additional funding

7.3 IV&V Risk State: Schedule/Resources

- Medicaid 1095-B UAT scheduled to start the week of Thanksgiving
- Lack of available Deloitte resources to discuss technical architecture changes
- Deloitte to provide a disaster recovery schedule for site change cutover, hardware inventory, and test plan
- Phase 2 Release 7 UAT does not have a defined end date

Major Impact:

- Limited resource availability the week of Thanksgiving for Medicaid 1095-B UAT
- Limited technical expertise onsite to discuss and conduct assessments on the development of the single database
- State cannot approve disaster recovery cutover without a schedule
- UAT efforts and design sessions for Phase 1 and Phase 2 stretch all resources

Recommended Risk Mitigation:

- Approved Phase 2 Release 7 schedule defines all milestones and the go-live date
- Subject matter expertise (SME) oversight increased on functional and technical design documents
- Technical architecture SME onboard to assess the development of the single database
- Project plan to conduct CMS testing, enhancement releases, and M&O releases throughout 2016

7.4 IV&V Risk State: Quality

- A total of 22 deferred defects remain from previous UATs
 - ✓ 1 critical, 17 highs, 3 mediums, and 1 low
- Incident Management tickets related to the auto renewal batch
- 8th Bimonthly Automated and Manual Code Review Report under construction
- Deloitte Security Team generates an application vulnerability security report
- Deloitte monitoring application performance during open enrollment period

Major Impacts:

- Deferred Phase 1 UAT defects may impact scope, cost, schedule, and resources
- Hot fixes required to address auto renewal and open enrollment issues
- Code review focused on RI Bridges and may result in needed improvements
- Vulnerability testing ensures all security vulnerabilities are identified and discussed
- Performance will be validated against SLAs and common expected usage scenarios

Recommended Risk Mitigation:

- “Real life” test scenarios thoroughly documented within every FDD and executed during SIT
- Identify and document “Known Production Issues” during SIT; assess their impact
- Defects found during UAT addressed as part of UAT; if deferred, an impact analysis is conducted and shared
- Start utilizing the SDLC checklist again and continue using post-production checklists
- Data quality scripts executed to identify and fix data integrity issues; a library of scripts for automated regression testing created
- Application vulnerability security testing conducted prior to Phase 2 Release 7 go-live and reported to the State for review and feedback
- Continually monitor system performance and submit metrics to the State
- Develop and maintain a consolidated RTM that includes both Phase 1 and Phase 2

7.5 Issues That Require Attention

There are no issues that require attention for CSG’s risk assessment; however, observations and recommendations are listed under Section 9.1.

8. PROJECT SUMMARY – OCTOBER

This section contains a summary of project accomplishments and activities for this period based on CSG's Statement of Work (SOW).

8.1 Manage IV&V Services

CSG provided the following IV&V services in the month of October 2015:

- Reviewed the following Deloitte deliverables
 - ✓ CR-190-B SHOP Enhancements
 - ✓ UHIP-94364 SSA Title II Income Enhancements FDD
 - ✓ October Release Training Plan
- Created the following IV&V deliverables:
 - ✓ Weekly IV&V Status Reports (multiple submitted)
 - ✓ Monthly Financial Status Reports for June and July (approved)
 - ✓ IV&V Monthly Review and Assessment Report (submitted)
 - ✓ Bimonthly Automated and Manual Code Review Report #7 (approved)
 - ✓ UAT Summary Report – Phase 2 Release 7 Cycle 1 Summary (approved)
 - ✓ UAT Summary Report – Phase 1 Release 6.5 (approved)
 - ✓ Continuous Integration Review – Phase 2 Release 7 Cycle 1 (approved)

8.2 Coordinate and Oversee UAT

Continued to manage and oversee Phase 1 and Phase 2 UAT efforts

8.3 Validate Automated Code Review Results

Began work on Bimonthly Automated and Manual Code Review #8

8.4 Validate Continuous Integration Test Results

Conducted walk-through of the Continuous Integration Report for Phase 1 Release 6.5

8.5 Verify Implementation Readiness

No implementation readiness activities conducted in the month of October

8.6 Verify Component Reusability

No reusability verification activities conducted in the month of October

8.7 Perform a System Audit

Awaiting the end of Phase 1 and Phase 2

8.8 Perform Financial Reviews

Please refer to section 7.2 for information on key IV&V Financial observations for this month.

9. SUMMARY OF KEY RECOMMENDATIONS AND OBSERVATIONS

The following is a summary of Key Recommended Risk Mitigation:

- Contract amendments finalize the scope of Phase 1 and Phase 2
 - ✓ Establish an end to Phase 1
 - ✓ Contract amendments approved through Phase 2 go-live
- Disaster Recovery Plan finalized for State review; CMS requirements included
- Phase 1 and Phase 2 RTMs continuously updated within JAMA
- Coordinate with the Budget Office for increased EOHHS and DHS SFY2016 funding; obtain additional funding
- Approved Phase 2 Release 7 schedule defines all milestones and the go-live date
- Subject matter expertise (SME) oversight increased on functional and technical design documents
- Technical architecture SME onboard to assess the development of the single database
- Project plan to conduct CMS testing, enhancement releases, and M&O releases throughout 2016
- “Real life” test scenarios thoroughly documented within every FDD and executed during SIT
- Identify and document “Known Production Issues” during SIT; assess their impact
- Defects found during UAT addressed as part of UAT; if deferred, an impact analysis is conducted and shared
- Start utilizing the SDLC checklist again and continue using post-production checklists
- Data quality scripts executed to identify and fix data integrity issues; a library of scripts for automated regression testing created
- Application vulnerability security testing conducted prior to Phase 2 Release 7 go-live and reported to the State for review and feedback
- Continually monitor system performance and submit metrics to the State
- Develop and maintain a consolidated RTM that includes both Phase 1 and Phase 2

9.1 Observations and Recommendations

Below is a log of the remaining observations and recommendations made by the IV&V team for the month of October 2015.

Table 3 - Observations and Recommendations

ID	Functional Area	Observations	Recommendations	Actions
379	Testing	<p>Incomplete Testing Efforts for Interfaces in SIT</p> <p>Deloitte's Interface SIT efforts primarily entails ensuring the files are correctly formatted and the data can be read. There does not appear to be a testing effort that includes viewing the data collection screens to see if the data is correctly displayed and the appropriate case action is taken per the data received. As a result, Interface testing in UAT has essentially replaced SIT as the initial test to see how the data is received and displayed in Bridges. This places a significant burden on the State to fully test all interfaces, and increases the amount of time and effort needed to test Interfaces in UAT.</p>	<p>The State should require that Deloitte fully test all interfaces in SIT prior to deploying the functionality into UAT, as described in Deloitte's P2 Application Development Plan: The objective of Perform System Integration Testing activity is to test the customized RI UHIP solution and confirm that various sub-systems and interfaces integrate with the solution and function as required. This testing will be performed in the System Test environment. The SIT testing effort should include not only receiving the files from partners, but reading and displaying data appropriately in Bridges.</p>	

ID	Functional Area	Observations	Recommendations	Actions
378	Technical	<p>Health Insurance Exchange Code Quality based on Bi-Monthly Code Review #7</p> <p>The random sample that CSG selected from recently modified modules and the fourth code review was used for the manual code review. The sample revealed several findings that falls into three basic areas of review 1) Comments 2) Organization 3) Error Handling. Although there were several issues identified during the code review, improvement was observed during this review on too.</p>	<p>Based on the issues found and recommendations, the following steps are recommended for the UHIP team to consider: a) Reduce the SONAR major issues within each release. b) Peer code reviews are a standard approach and are mandatory. c) Discuss the approach for new single database design; conduct meetings with CSG and the State to provide more insight on the integrated development to inform all the areas of the code which are planned to be refactored. d) Provide the code quality checklist to the development team and closely monitor if they make sure to RUN Sonar and complete peer code reviews before checking in class to the repository. e) Continue making efforts to improve the code quality and code as per best industry standards.</p>	<p>10/09/15 BM - Deloitte has been asked to focus on adding comments in the class. Files longer than 2,000 lines should be avoided. Refactored code where it performs multiple purpose.</p>

ID	Functional Area	Observations	Recommendations	Actions
377	Technical	<p>Integrated Eligibility Services Code Quality based on Bi-Monthly Code Review #6</p> <p>The random sample was selected from recently modified modules and the fifth code review was used for the manual code review and automated code review. The sample revealed several findings that fall into three basic areas of review 1) Comments and 2) Organization and Error Handling. However, all issues still remained from the fifth code review with very few deficiencies remediated.</p>	<p>Based on the issues found and recommendations, the following steps are recommended for the UHIP team to consider: Provide the code quality checklist to the development team and closely monitor if they make sure to RUN Sonar and complete peer code reviews before checking in class to the repository. Continue making efforts to improve the code quality and code as per best industry standards. Every developer must run the SONAR report during development and during defect repair. Code should be SONAR compliant for critical and blockers. Reduce the SONAR major issues within each release.</p>	<p>07/31/15 - The issues encountered from the IES code will be re-assessed after the completion of 7th Bi-Monthly code (on HIX code base) review, which is expected to be delivered by 09/18 to the State. 06/04/15, Deloitte mentioned that the findings from the IES Code review #6 report will be considered to fix after June 30th. The reason for the delay is stated as Pilot, UAT and stretched for time to resolve identified enhancements and work requests. Deloitte will schedule a meeting with the USI Development team to discuss automated code review findings identified through SONAR.</p>

ID	Functional Area	Observations	Recommendations	Actions
375	Technical	<p>Disaster Recovery (DR) site moving to Sacramento</p> <p>Deloitte verbally informed the State that the DR site managed by NTT Data will be relocated to Sacramento from San Jose. In addition, the contractual DR planned for October may not happen because of the pending site change. The disaster recovery environment is a mirror image of the Warwick data center technology, where both data and the server images are replicated asynchronous to the DR facility. The State is required to communicate any DR site change to CMS for prior approval.</p>	<p>Deloitte should provide more explanation to the State about the new DR site change. The new site change, including testing efforts should be documented or update the DR Plan 12 and then circulated through the State PMO process for formal approval. CMS should also be of the pending change for prior approval. Deloitte should make arrangements with the State designee to inspect the new Sacramento site.</p>	<p>10/30/15 BM - Deloitte is in the process of outlining the testing plan. Deloitte will provide a cutover date to the State.</p> <p>10/23/15 BM- Deloitte to coordinate with NTT to submit the testing plan and hardware inventory to the State. The State and Deloitte will select the date for the cutover from the San Jose DR site.</p> <p>10/09/15 BM - Official DR site move document has been submitted to the State by Deloitte. The State is working on a change request form for CMS.</p> <p>09/25/15 BM - Deloitte mentioned that they plan to submit the site change formal request by next week. The State has asked Deloitte to submit a change request to the PMO.</p>

ID	Functional Area	Observations	Recommendations	Actions
373	Requirements	<p>State Contract Manager Needed</p> <p>A full-time Contract Manager would enable the State to more thoroughly address functional and technical requirements during both the approval process of contract amendments and post-approval compliance period.</p>	<p>The Contract Manager's responsibility is to ensure contracts and contract amendments are properly structured and followed. This focus protects the State and all project stakeholders from both failing to meet contractual requirements and broadening scope. The State would benefit most by acquiring a contract manager before the Phase 2 contract amendments are finalized; however, the acquisition of a dedicated contract manager is beneficial at any time to properly enforce existing contracts.</p>	<p>10/27/15 BV – No indication that the State will acquire a Contract Manager.</p> <p>09/09/15 BV - The role of a Contract Manager was discussed during the Weekly IV&V Status Update.</p>
372	Testing	<p>Enhancement Defects are being moved out of SIT and into M&O</p> <p>Defects are being moved out of SIT and into M&O without the State's knowledge and approval. Moving defects out of SIT impacts the State's ability to fully assess the quality of SIT and impact the State's ability to make an accurate Go/No Go decision for UAT. When defects are moved from one release to another, it is not possible to trace them, traceability is totally lost without prior knowledge of the defect ID. It also impacts the number of items the State is agreeing to manage through M&O. In addition, this impacts the quality of the application that is being deployed into UAT.</p>	<p>Deloitte should be required to seek the State's approval to move defects from SIT into M&O. This will allow the State to fully assess the quality of SIT and gain an understanding of what may impact the quality of UAT; it also allows the State to fully understand and manage what defects are being sent to M&O. Deloitte should be required to seek State's approval prior to moving any SIT defect into M&O regardless of severity/priority in the SIT Exit Report.</p>	<p>10/23/15 GJD - This issue is continuing to be monitored. If no further occurrences, it will be closed.</p> <p>09/15/15 BV - This observation pertains to SIT defects identified within an enhancement release but moved into M&O.</p>

ID	Functional Area	Observations	Recommendations	Actions
371	Requirements	<p>Phase 2 - Requirement Traceability Matrix (RTM)</p> <p>The current RTM partially supports the new centralized database approach for the UHIP architecture framework. The citizen and the worker portal applications will be integrated with shared functionalities. This will be a significant change to existing architecture, including security and shared application frameworks. Without an updated RTM it will be difficult for the State to interpret and keep track of the requirements. The RTM helps to create a downstream flow of connecting software requirements to product requirements.</p>	<p>As changes are implemented, Deloitte and the State should perform the required updates to the RTM. The RTM will help ensure that the project requirements are met as well as track all changes made to the system.</p>	<p>10/30/15 BM - Deloitte will provide a timeline of when Functional P2 updated RTM will be available for the State to review.</p> <p>10/23/15 BM - Phase 2 Technical RTM will be updated collaboratively by the State and the Deloitte. Deloitte has scheduled weekly meetings with the State and IV&V on the RTM. 10/09/15 BM - No update so far on the Phase 2 RTM.</p> <p>09/25/15 BM - CSG has provided feedback to the State.</p> <p>09/11/15 BM – An inquiry was made to Deloitte’s technology roundup representative; no updates so far on Appendix N from Deloitte.</p> <p>08/28/15 – According to Deloitte the RTM Appendix M will be updated after every release. For Appendix N, no updates have been made by Deloitte as of now. Deloitte will discuss Appendix N during the next technology roundup.</p>

ID	Functional Area	Observations	Recommendations	Actions
369	Testing	<p>HIX Application Vulnerability Testing</p> <p>Deloitte is currently conducting security testing within the HIX application; the security testing plan and the scope have not been shared with the State Security team. Deloitte has not made the State aware of what areas of the application where security scans are planned or have been conducted. Nor does the State have insight into any information on when and what level of defects were found during testing.</p> <p>Without this information, there may be security vulnerabilities yet to be identified, discussed, and resolved.</p>	<p>It is recommended that Deloitte informs the State Security team about all activities related to Security testing. The State should be notified about the severity of all defects found and provided with a detailed plan, recommendations, and steps taken to fix any issues identified.</p>	<p>10/23/15 BM- No update and discussion held during the week on the app security testing reports.</p> <p>10/09/15 BM - No activity was performed on this during the week.</p> <p>09/25/15 - During Deloitte weekly security meeting, they stated that they are in the process of outlining a report, which will have all security related activities.</p> <p>09/11/15 BM - Security activities performed on HIX application will be discussed with the State and Deloitte during the next tech meeting.</p> <p>08/28/15 - There was no discussion on the security testing during the week.</p> <p>08/19/15 - CSG discussed the observation with the State tech team; the State will follow up with the Deloitte to share the results of the Security application testing which was completed on 08/24/15.</p>

ID	Functional Area	Observations	Recommendations	Actions
368	Quality Assurance	<p>Section 508 Compliance (Accessibility) Testing</p> <p>Section 508 requires that all website content be accessible to people with disabilities.</p> <p>It was inadvertently discovered that a list of codes were being excluded from Deloitte's accessibility testing, and the list was not properly documented within any deliverables. This prompted Deloitte to update the Phase 1 Detailed Test Plan (outside of the Change Management process) with the list of exclusions. Since accessibility is not tested in UAT, the State and CSG require Deloitte to provide a letter of attestation that accessibility testing has been completed; however, this does not equate to the true user experience.</p> <p>The State could face serious fines if it is later discovered that the application is not truly 508 compliant and end-users with disabilities are not able to fully utilize the system.</p>	CSG recommends the State identify testers who are visually or hearing impaired to test the accessibility functionality.	<p>10/15/15 - GJD: CSG Is continuing to monitor Accessibility testing throughout the various releases.</p> <p>09/11/15 - GJD: CSG will continue to monitor and report Accessibility testing analysis for State review while consideration and vendor selection is discussed.</p> <p>08/13/15 - GJD: State discussed the options of employing a company to check the 508 Compliance of UHIP and/or utilizing State staff that may be visually and/or hearing impaired. The State is considering a date that will allow testing to occur to cover both Phase 1 and Phase 2. CSG will continue to monitor.</p>

ID	Functional Area	Observations	Recommendations	Actions
367	Technical	<p>CMS Security Update</p> <p>CMS has asked the State to provide the list of all the major areas which will be changed or modified in the system with the new centralized database approach (that will share the functionalities between citizen and the worker portal). CMS shared a link to download the form, which needs to be filled out by the security team with all changes listed. As per CMS guidance, any changes that require data conversions/migrations i.e. staging environment have to be MARS-e compliant, the same document and third-party test assessment will be required of that environment for CMS approval.</p>	<p>The State should ask Deloitte to update the architecture document that should contain all the areas to be refactored, modified, and changed in the new database approach; the updates should include all the updated information at least on all the significant areas listed by CMS. The State security team with Deloitte should schedule a meeting to discuss the changes with CMS.</p>	<p>10/23/15 BM - DR changes documented by Deloitte, which will be submitted to CMS by the State. Deloitte is in the process of documenting architecture/ security changes in another change request form for CMS review.</p> <p>10/09/15 BM - State to finalize the date to update CMS on DR site change, system changes, and security changes.</p> <p>09/25/15 - The State is planning to have a call with CMS to update them on the DR site change and progress on the change request form for the single database design.</p> <p>09/11/15 BM - Deloitte is still in the process of drafting all the system changes for the State and CMS to review.</p> <p>08/28/15 BM - There were no discussions on this area/piece of work during the week.</p>

ID	Functional Area	Observations	Recommendations	Actions
366	Technical	<p>2015 Disaster Recovery Testing</p> <p>The 2015 DR plan has not been documented. Viewing disaster recovery at an enterprise level may reveal missing or critical interdependencies. In addition, a complete business continuity plan has not been finalized. There is limited time available to the open enrollment. Disaster recovery should be scheduled and executed before November 2015 (the State previously decided to have a DR test before or after an open enrollment period, same will/can be considered for 2015). There has been no point of contact from Deloitte as to whether NTT Data has been identified.</p>	<p>Recommend creating a 2015 Disaster Recovery (DR) Plan. Deloitte should identify the point of contact from NTT and Deloitte's Infrastructure team for all DR related activities and finalized a date for testing. It is also recommended that Deloitte create and maintain a Disaster Recovery Tracker to track DR plans across vendors and agencies.</p>	<p>10/30/15 BM - 2015 contractual DR tentatively scheduled in January 2016. Deloitte in the process to outline / finalize the test scenarios for the test.</p> <p>10/09/15 BM - Deloitte is outlining a DR plan.</p> <p>09/15/15 BV - The State requested a copy of the DR plan.</p> <p>08/28/15 - Deloitte is currently waiting on the test cases and final list of all the interfaces to be tested during the 2015 DR from the State.</p> <p>08/07/15 - During the Deloitte technology roundup meeting, the tentative scope of the 2015 UHIP DR test was discussed. The State has asked Deloitte to finalize the vendor for the circuit to connect NTT Data (SJ) UHIP DR site and Sungard (NJ) State DR site. The San Jose site will connect to the state interfaces in NJ as well as the Federal interfaces.</p>

ID	Functional Area	Observations	Recommendations	Actions
364	Quality Assurance	Production Dashboard does not accurately reflect the correct number of non-closed work requests	CSG would encourage Deloitte to update the non-closed work requests to include the Clarification and Ready for Production Deployment statuses and in turn this would reflect the correct number of work requests currently in a "Not Closed or Cancelled" status.	10/16/15 – GJD: Email sent to Deloitte requesting to have the dashboard corrected. 08/24/15 - An email was sent to the listed owner of the Production dashboard, Matt Rufener on 08/12/15; however, an undeliverable email was received stating the email address was rejected. CSG will continue to work on who should be contacted to resolve this issue.
361	Requirements	Drug Court and Taverse not tested in P2 UAT Drug Court & Taverse programs have not been tested in P2 UAT. It has been identified that EOHHS programs like Drug Court and Taverse have not been incorporated into the new IES solution. Scripts are uploaded into JAMA but due to the non-availability of DC and Taverse have not been tested.	The State should determine whether these programs need to be incorporated into the new IES worker portal via Phase 2. As per the bridging document, all the human services, programs currently supported by the InRhodes must be incorporated into the IES worker portal. If the programs need to be included, the State should ask DDI vendor to develop the functionalities within the IES.	08/28/15 - There are no updates on adding the programs into the worker portal as of now. 08/20/15 - No update on adding the programs within the IES during the week. CSG will bring up this with the State again during weekly status. 07/24/15 - There has been no discussions so far on how and when these programs will be implemented into the new IES worker portal.

ID	Functional Area	Observations	Recommendations	Actions
357	Technical	<p>MFA for Phase 2 Remote Access</p> <p>The IRS asked the State to implement MFA for IES worker portal. UHIP/IES Worker Portal will only be accessible from within the state's network.</p> <p>The IRS guidelines state that the individual accessing system containing FTI from a remote location requires an encrypted modem and/or Virtual Private Network. Additionally, two-factor authentication - cryptographic identification device, token, is required whenever FTI is being accessed from an alternate work location. The IRS has also stated that FTI can only be viewed using State provided laptop or workstation.</p>	<p>Business approval from all the agencies is immediately required for the remote access. The state must determine how this implementation needs will be funded. State and Deloitte must work together to find out if something can be leveraged from the Phase 1 MFA implementation. Gaps and the requirement must be documented instantaneously so that the scope of work can be included in APD.</p>	<p>10/30/15 BM - HSRI and EOHHS to provide the business need for MFA to Deloitte.</p> <p>10/23/15 BM - The State security team, HSRI, EOHHS and Deloitte will utilize the technology roundup meeting on 10/26/15 to discuss a better approach on MFA for worker portal.</p> <p>10/09/15 BM - The State security has not finalized the future solution on MFA for worker portal.</p> <p>09/18/15 BM - Deloitte provided the P1, P2 application overview to the State security team; the State is currently discussing the best approach on the P2 MFA internally.</p> <p>09/11/15 BM - The State security CISO requested an application demo by Deloitte to get an understanding of all the system changes; Deloitte has scheduled a session with the State to explain and walk through the new single database design approach. The State will decide whether to go for Juniper VPN or terminal services after the demo.</p>

ID	Functional Area	Observations	Recommendations	Actions
356	Technical	<p>Centralizing Common Functionalities Between Worker Portal and HSRI Integration</p> <p>Deloitte presented 3 different options to the State for IES and Exchange integration. State selected the option to centralize the common functionalities. New design approaches will not require Synchronization of P1 and P2 Databases. Eligibility and enrollment HIX data model will replace with IES data model.</p> <p>The approach will integrate functions across Public Assistance and Exchange for EOHHS, CC, and DHS. Reports and Notices between IES and Exchange will be limited to case data only. Integrated eligibility system will be considered as a system of record Eligibility, case management, FDSH, Enrollment Data. If any agency is down for maintenance, for release activities or for any unexpected disaster all the areas will be affected and will be out of service. There is very minimal technical architecture, information shared with the State at this time. Plan 10, DMP, Security design plan and other technical documents, which were based on a separate DB approach, need to be updated with the new approach.</p>	<p>Deloitte should be required to provide technical expertise to help the State understand how and what areas of the system will be refactored or modified to incorporate single database efforts. Deloitte has failed to discuss with the State how the immediate storage area for the staging DB data processing will work. Deloitte must work closely with the State and all the agencies to discuss the Phase 2 new architecture approach. An Initial assessment of the new approach is highly recommended to identify any gaps. Critical areas such as 834 and 1095 should also be assessed in parallel.</p>	<p>10/23/15 BM- Deloitte in the process of scheduling a weekly meeting to engage in phase 2 technical architect with CSG and the State. 10/09/15 BM - Deloitte hasn't scheduled weekly development session with the State and CSG. Plan 10, 05, 12 security documents haven't been updated as of now.</p> <p>09/25/15 BM - CSG requested Deloitte involve IV&V, so IV&V gains a better understanding of the single database development.</p> <p>09/18/15 BM - the State have requested Deloitte to update the technical design document (Plan 10, security design document, DMP, RTM).</p> <p>09/11/15 BM - The single database design document which outlines all the database/table changes has been rejected by the State. Deloitte is in the process of scheduling a session with Deloitte to</p>

ID	Functional Area	Observations	Recommendations	Actions
350	Finance	<p>EOHHS/DHS FY15 and FY16 State Funds</p> <p>The Governor's Recommended budget for FY15 and FY16 provides additional funding for UHIP; however, since the budget was developed in late 2014, additional costs have been incurred through various Deloitte amendments. Including Contract Amendment 31, the deficit for GR State funds is estimated to be approximately \$1.2 million. The UHIP Finance Group Budget Office representative stated that there is no plan to add additional State funds for UHIP' that would limit the State to reallocating funds from within the EOHHS/DHS budgets.</p>	<p>EOHHS and DHS need to determine how they will be able to obtain or reallocate State funds sufficient to meet the total UHIP funding commitments through the end of FY16.</p>	<p>10/09/15 – EOHHS and DHS submitted revised FY16 State budget requests.</p> <p>09/09/15 - The State has a revised budget process. By the end of September, EOHHS and DHS will submit revised budget requests for FY16. This will include a request for additional UHIP funding. It is uncertain if the request for additional funding will be approved. As a part of this process the agencies will also present their FY17 budget requests. 07/07/15 - No update available.</p> <p>06/24/15 - The legislature has passed the State budget, there are no additional funds beyond what was in the Governor's Recommended budget, and approx. \$6.4 mil that was provided in the Governor's budget is now uncertain making it more important for EOHHS and DHS to address a deficit in UHIP state funds.</p>

ID	Functional Area	Observations	Recommendations	Actions
335	Finance	<p>HSRI Funding for UHIP Costs FY16</p> <p>HSRI has been 100% funded by Federal grants. States were not able to request additional Federal grants for State exchanges after 11/2014. At some point (unknown to CSG), Federal funds will run out. CSG assumes this may happen in FY16. The timing will be impacted by the constant stream of new project change requests and the decision to extend the development effort.</p> <p>Without some source of funds, HSRI and the RI State exchange cannot continue to operate. The entire scope of the UHIP project would be drastically altered if HSRI and the exchange ceased to exist.</p> <p>The Governor has proposed an assessment on health care premiums as a way to generate operating funds for HSRI. This is a controversial proposal that requires legislative approval.</p>	<p>There should be a budget and spending (cash flow and timing) plan for transitioning HSRI from a Federal funded agency to some other source of funding. In addition, any plan needs to account for currently committed UHIP costs as well as likely additional new upcoming UHIP costs.</p> <p>There should be a second plan to establish a UHIP budget/spending path forward if the state decides to abandon the state exchange.</p>	<p>10/09/15 – IAPDU approved for DDI through 12/31/15.</p> <p>09/09/15 - HSRI approved funding for Deloitte Contract Amendment 34, HSRI is closely monitoring their funding based on responses received from CMS and FNS.</p> <p>08/20/15 - The State is working with Deloitte to determine the total cost of extending the development effort into 2016 and the portion of the cost that will be the responsibility of HSRI. At that point, HSRI can determine the impact on their remaining federal grant funds as well as their new state funding.</p> <p>07/07/15 - HSRI still has some federal funds that can be used for development through 12/2015.</p>

ID	Functional Area	Observations	Recommendations	Actions
308	Requirements	<p>Semi-annual Security Report</p> <p>There are several requirements (approx. 8 to 10) traced out from the RTM which are being marked as NOT MET, for example- Deloitte has not developed a security report, which is expected to be submitted every 6 months to the State. As per the requirement, the report must define all security-related activities, upcoming security initiatives, and long-range security plans. The state has not been provided with any such document from the DDI vendor for upcoming security plans, activities to protect the system and application appropriately.</p>	<p>The state should ask Deloitte to provide clarification or have the credit over to the State on the undeveloped reports and all such requirements, which are not being MET. Moving forward Deloitte must submit the security report every six months.</p>	<p>10/09/15 BM - Negotiations on NOT MET items is still under the leadership decision.</p> <p>09/11/15 - The State tech lead stated that all the NOT MET appendix N items will be negotiated with Deloitte in the upcoming contract amendment.</p> <p>08/20/15 - No update on the RTM items which were identified as NOT MET.</p> <p>07/31/15, there are discussions planned which will take place between the State and Deloitte on all the NOT MET RTM requirements.</p> <p>07/03/15 - Findings from the RTM Appendix N have been shared with the State leadership, NOT MET items will be negotiated towards the upcoming CA with the Deloitte.</p> <p>06/04/15 - Findings from the RTM Appendix N have been shared with the State leadership, NOT MET items will be used as leverage during the CA 32 & 33 contract negotiation.</p>

Appendix A: Production Defect Analysis

➤ A comparison of open production defects in JIRA from October 1, 2015 through October 31, 2015 (based on information in JIRA)

Table 4 - JIRA Defects without AM-PM Tickets

JIRA Defects without AM-PM Tickets			
Severity	09/30/2015	10/31/2015	+/-
Critical	1	0	-1
High	3	3	0
Medium	4	3	-1
Low	1	0	-1
Total	9	6	-3

Table 5 - JIRA Defects with AM-PM Tickets

JIRA Defects with AM-PM Tickets			
Severity	09/30/2015	10/31/2015	+/-
Critical	0	0	0
High	42	29	-13
Medium	53	54	+1
Low	7	3	-4
Total	102	86	-16

- ✓ Defects logged without AM-PM tickets decreased from the previous month
- ✓ The total production defects decreased by 17% from the previous month
- ✓ Total production defects = 92

- The following graph depicts critical and high defects created and closed weekly over the past six months

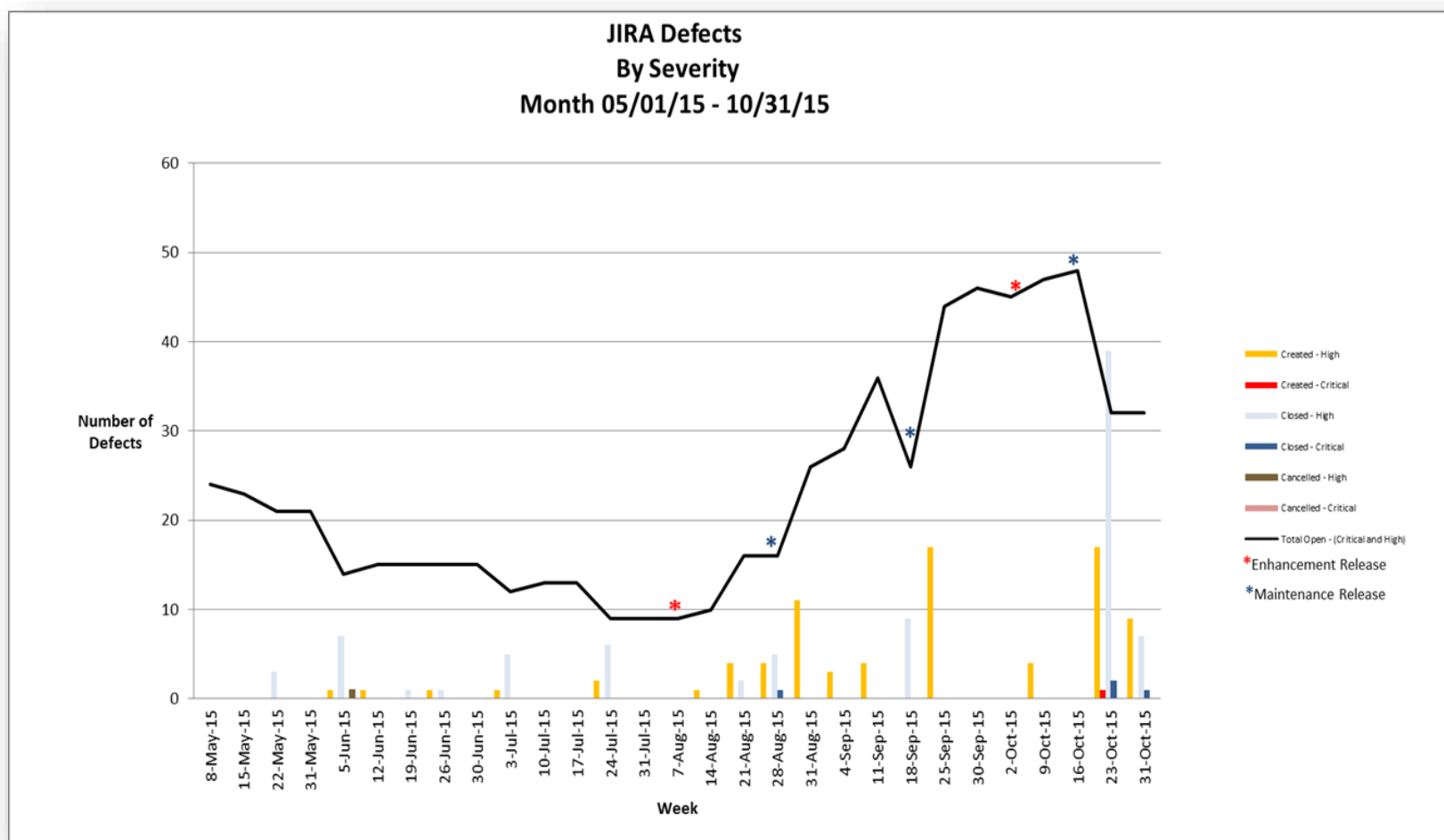


Figure 1 - JIRA Defects with AM-PM Tickets, Past Six Months

➤ Historical View of Critical and High Defects Aging

Table 6 - JIRA Open Production Defects Aging

JIRA Open Production Defects (Aging)												
Days	Critical						High					
	MAY	JUN	JUL	AUG	SEP	OCT	MAY	JUN	JUL	AUG	SEP	OCT
60 - 90	0	0	0	0	0	0	1	0	0	2	1	2
91 - 120	0	0	0	0	0	0	3	1	0	0	2	1
>120	0	0	0	0	0	0	17	11	5	3	3	1
Total	0	0	0	0	0	0	21	12	5	5	6	4

➤ Current View of all Open Defects as of October 31, 2015

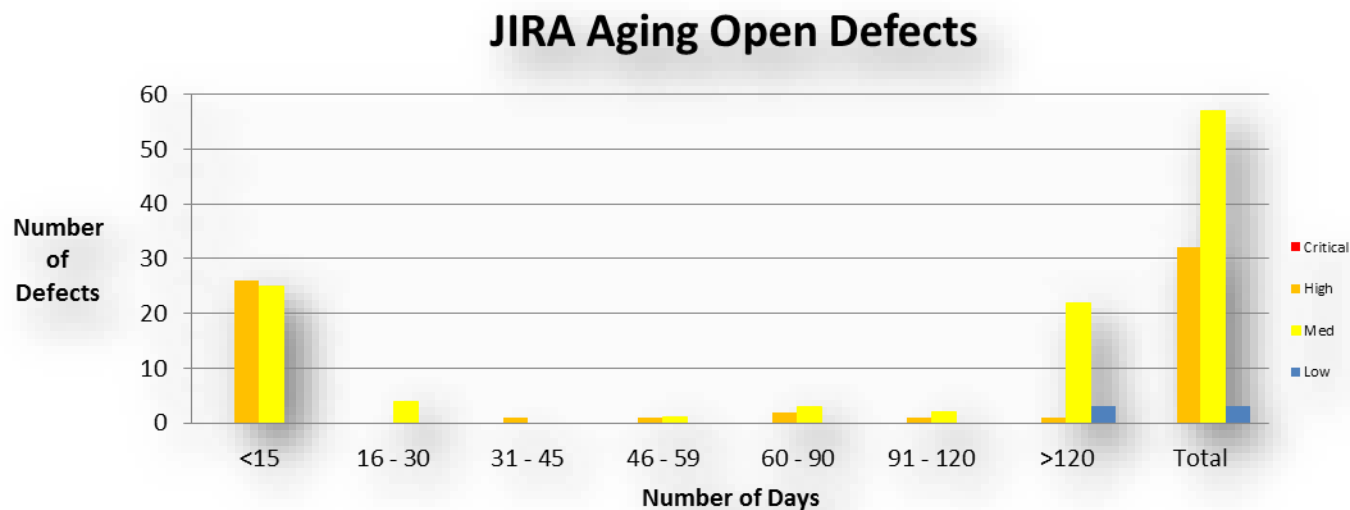


Figure 2 - JIRA AM-PM Aging Open Defects

- The following graph illustrates the number of open defects, the number of defects addressed within SIT, and the number of defects closed

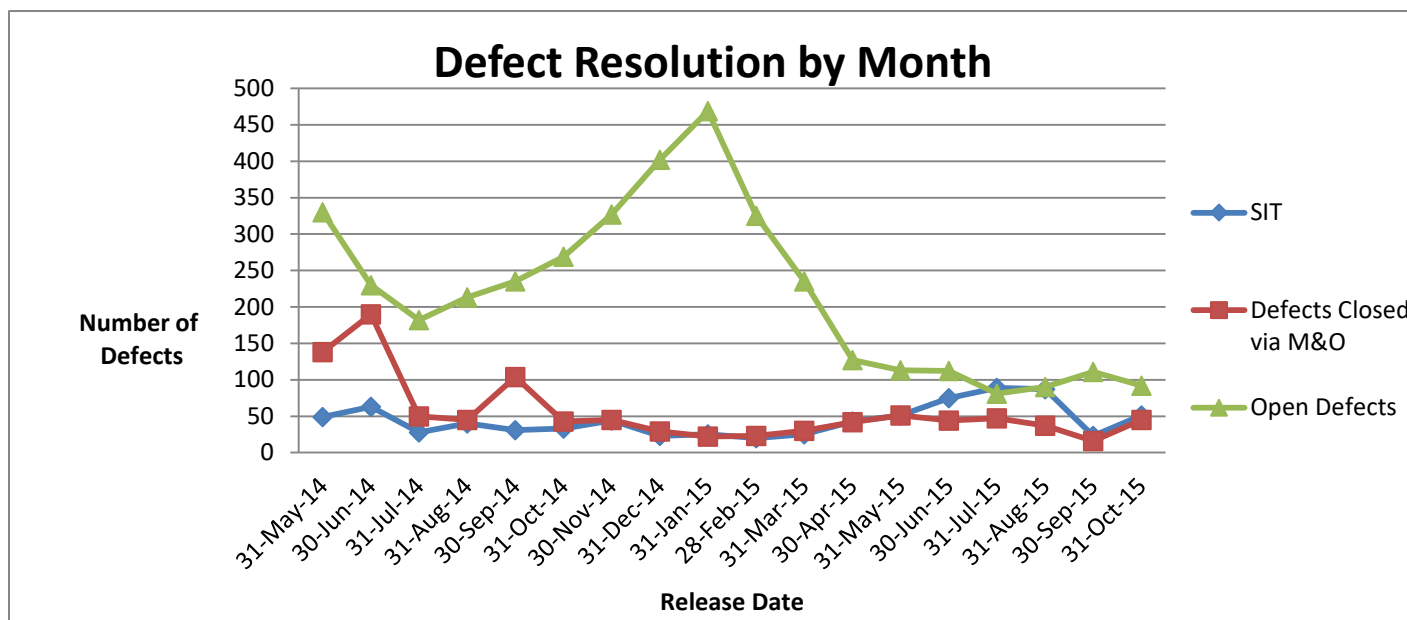


Figure 3 - Work Requests Deployed by Month

- ✓ The October M&O Release closed 45 defects, including SIT a total of 95 defects was addressed
 - 32 non-data defect resolutions and 13 data defect resolutions deployed into Production
- ✓ The following breakdown categories the defects closed in SIT by the top 5 root causes:
 - 13 Coding related
 - 11 Environment issues
 - 10 Not Reproducible
 - 5 Invalid and 5 no root causes identified
- ✓ 18 Hot Fixes deployed to production; 11 non-data and 7 data fixes

- AM-PM is the trouble ticketing system; where deficiencies are reported from the service desk or a user enters a deficiency. AM-PM provides ticket management functionality and tracking against service level agreements.

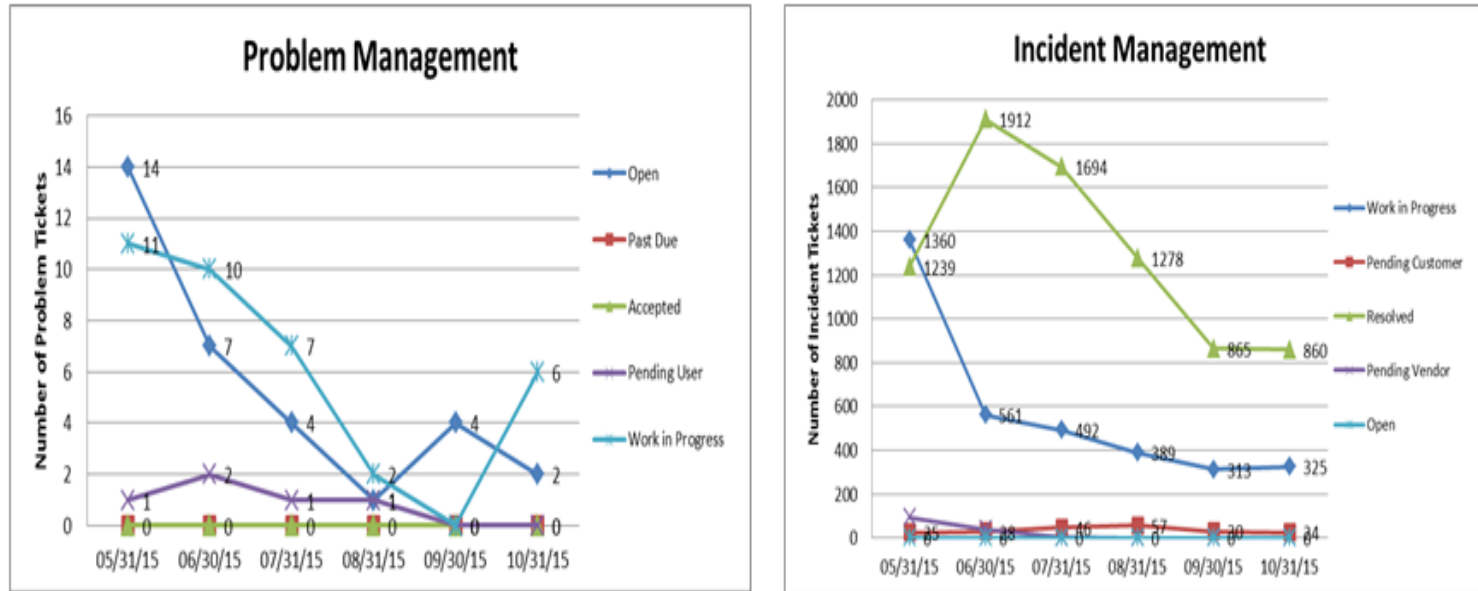
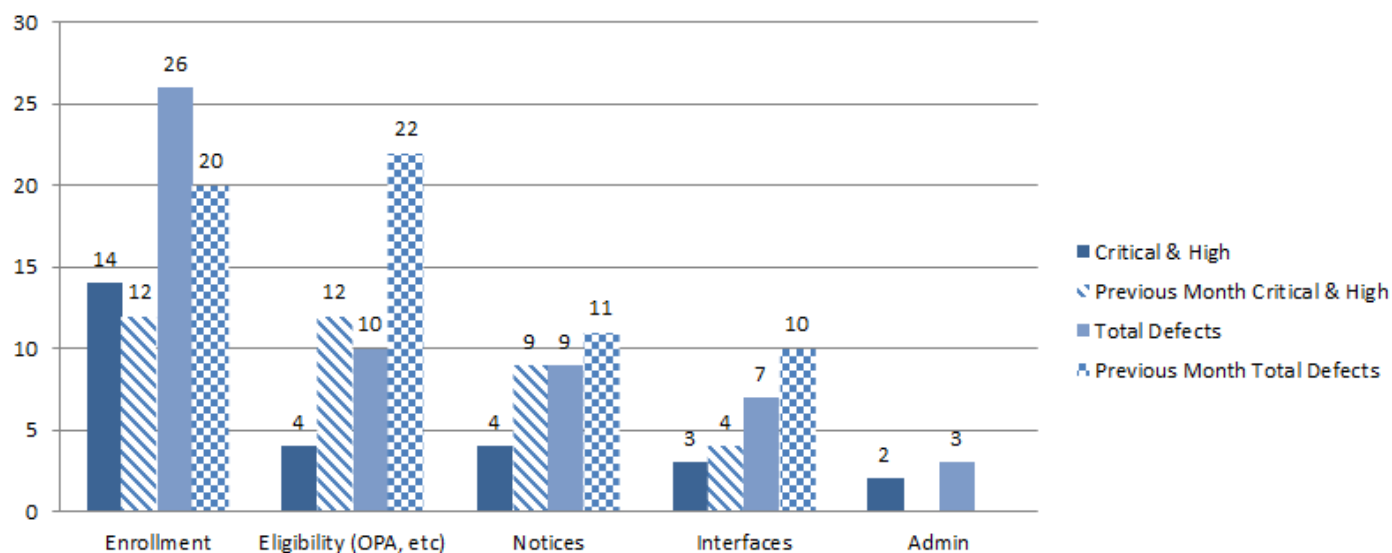


Figure 4 – AM-PM Trending Weekly

- ✓ 1,209 incident tickets in a status other than closed; a slight decrease from the previous month
- ✓ The number of 'resolved' tickets continues to decrease slightly; State is encouraged to continue their review
- ✓ 8 problem ticket open in AM-PM; increased by 4 from the previous month

- The following graph shows the top 5 Defect Tracks ranked by both Critical & High and Total Defects

Top 5 Defect Tracks (Ranked by both Critical and High; Total Defects)



Note: There are a total of 22 defects that have no track identified; of these, 4 have a high severity

Track	Critical & High	Previous Month Critical & High	Total Defects	Previous Month Total Defects
Enrollment	14	12	26	20
Eligibility (OPA, etc.)	4	12	10	22
Notices	4	9	9	11
Interfaces	3	4	7	10
Admin	2	0	3	0

Figure 5 – Top Five Defect Tracks